

In the Claims:

-- Claim 7. (Amended) The method of ~~any one of claims 1 to 6~~
claim 1, wherein the target DNA encodes a protein selected from the group consisting of
enzymes, antibodies, antigens, binding proteins, hormones, cytokines and plasma
proteins. --

-- Claim 9. (Amended) The method of ~~claim 2 or 3~~ claim 2, wherein
the restriction enzyme is a class IIS restriction enzyme. --

-- Claim 16. (Amended) The method of ~~any one of claims 10 to 15~~
claim 10, wherein the target DNA encodes a protein selected from the group consisting of
enzymes, antibodies, antigens, binding proteins, hormones, cytokines and plasma
proteins. --

--Claim 18. (Amended) The method of ~~claim 11 or 12~~ claim 11,
wherein the restriction enzyme is a class IIS restriction enzyme. --

--Claim 22. (Amended) The method of ~~any one of claims 19 to 21~~
claim 19, wherein the target DNA encodes a protein selected from the group consisting of
enzymes, antibodies, antigens, binding proteins, hormones, cytokines and plasma
proteins. --

-- Claim 25. (Amended). A method for evolving a polypeptide and a
polynucleotide encoding same, comprising steps of:

1) preparing a library of mutant polynucleotides having a plurality of
mutations by introducing two or more mutated sequences identified in two or more

DE1490

mutant polynucleotides selected by ~~at least one of the methods of claims 1, 10 and 19~~ the method of claim 1, into a target polynucleotide; and

2) expressing the library obtained in Step 1 in an appropriate host cell and selecting or screening the expressed polypeptides to obtain a mutant polypeptide having a desired property and a polynucleotide encoding same. -

-- Claim 26. A method for evolving a polypeptide and a polynucleotide encoding same, comprising repeating the method of ~~any one of claims 1, 10 and 19~~ claim 1 with the mutant polynucleotide prepared by the method ~~of claim 25~~ for evolving a polypeptide and a polynucleotide encoding same, comprising steps of:

1) preparing a library of mutant polynucleotides having a plurality of mutations by introducing two or more mutated sequences identified in two or more mutant polynucleotides selected by the method of claim 1 into a target polynucleotide;
and

2) expressing the library obtained in Step 1 in an appropriate host cell and selecting or screening the expressed polypeptides to obtain a mutant polypeptide having a desired property and a polynucleotide encoding same as a target polynucleotide. -